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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|-----------------------------|------------------------|
| 10/550,085 | 09/19/2005 | Josef Schmidt | 12604/14 | 1558 |
| 26646 7590 01/25/2008 KENYON & KENYON LLP ONE BROADWAY NEW YORK, NY 10004 | | | EXAMINER NGUYEN, TUYEN T | |
| | | | ART UNIT 2832 | PAPER NUMBER |
| | | | MAIL DATE 01/25/2008 | DELIVERY MODE PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
|------------------------------|-------------------------------|--------------------------------|--|
| Office Action Summary | Application No. 10/550,085 | Applicant(s) SCHMIDT ET AL. | |
| | Examiner TUYEN T. NGUYEN | Art Unit 2832 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 13-26 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 13-26 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 September 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date <u>6/20/2007</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Drawings

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the electrical energy-transmission device includes a primary-conductor arrangement including at least two primary conductors extending parallel to each other and at least one secondary winding arrangement electromagnetically coupled to the primary conductor arrangement, the secondary winding arrangement is arranged at a lower side of a floor of a vehicle and the secondary winding arrangement is embedded in a potting compound must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will

be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 19-24 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 19, applicant should clarify the structure/arrangement of the primary conductor and the secondary winding.

Regarding claim 21, applicant should clarify the structure/arrangement of the secondary winding relative to a vehicle.

Regarding claim 22, applicant should clarify the structure/arrangement of the secondary winding relative to a potting compound.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 13-15 and 26 are rejected under 35 U.S.C. 102(b) as being anticipated by Milavec et al. [US 6,369,685 B1].

Melavec et al. discloses a magnetic device [figures 1-4] comprising:

- at least one ferrite core means [24] including a pair of E-shaped cores;
- a support means [10] connected to the ferrite core; and
- at least one flat winding means [16, 18] disposed about one limb of the E-shaped cores,

wherein the flat winding arranged as a conductor track on a multilayer board having a plurality of electronic components [32].

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 16-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Melavec et al. in view of Jitaru [US 6,466,454 B1].

Melavec et al. discloses the instant claimed invention except for the specific of housing and heatsink.

Jitaru discloses a transformer structure disposed on/in a printed circuit board enclosed in a casing [5] and attached to a heatsink [58], wherein the heatsink including a plurality of cooling fins.

It would have been obvious to one having ordinary skilled in the art at the time the invention was made to include housing and heatsink in Melavec et al., as suggested by Jitaru, for the purpose of providing heat transfer.

Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Melavec et al. in view of Jelitschka [US 2002/0036561 A1].

Melavec et al. discloses the instant claimed invention except for the specific of the flat winding.

Jelitschka discloses a planar coil disposed in depressions formed in a plastic part [figure 2].

It would have been obvious to one having ordinary skilled in the art at the time the invention was made to use the winding design of Jelitschka in Melavec et al. for the purpose of reducing the thickness of the winding.

Claims 13-15 and 19-26, as best understood in view of the rejection under 35 USC 112 second paragraph, are rejected under 35 U.S.C. 103(a) as being unpatentable over Seelig [US 6,407,470 B1] in view of Melavec et al.

Seelig discloses a system for contactless energy transmission comprising:

- a transmitter head including:
 - at least one ferrite core;
 - at least one support;
 - a secondary winding [SS] mounted on the support and ferrite core; and
 - primary conductors [PL] arranged on a floor at a distance A from each other,

wherein a distance from the transmitter head to the floor is between $0.05 \cdot A$ and $0.2 \cdot A$.

Seelig discloses the instant claimed invention except for the specific of the ferrite core.

Melavec et al. discloses a magnetic device [see above] having a ferrite core structure, as claimed.

It would have been obvious to one having ordinary skilled in the art at the time the invention was made to use the magnetic device of Melavec et al. in Seelig for the purpose of completing the magnetic structure.

Regarding claim 19, Seelig discloses the primary conductors and the secondary winding are mechanically arranged separated from each other.

Regarding claim 20, Seelig discloses the flat conductor for the primary conductors.

Regarding claim 21, Seelig discloses the secondary winding disposed on the floor of a vehicle.

Regarding claim 22, the specific potting compound use to form the secondary winding would have been an obvious design consideration for the purpose of providing a molded winding.

Regarding claims 23-24, the specific arrangement of the primary conductor and material use for the conductor would have been an obvious design consideration for the purpose of reducing skin effect.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TUYEN T. NGUYEN whose telephone number is 571-272-1996. The examiner can normally be reached on M-F 8:30-5:00.

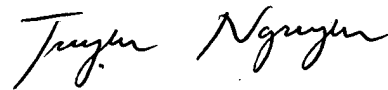
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, ELVIN ENAD can be reached on 571-272-1990. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

TN *TN*



TUYENT T. NGUYEN
Primary Examiner
Technology Center 2800